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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,642	12/05/2005	David B Harder	758.1416USWO	7536
23552 7590 08/05/2008 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER GONZALEZ, MADELINE	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 08/05/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,642	<b>Applicant(s)</b> HARDER ET AL.	
	<b>Examiner</b> MADELINE GONZALEZ	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-29 and 31-36 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

In reply to applicant's response dated April 28, 2008

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-21, 23, 26-29, 31, 33, 34 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Krull (U.S. 5,490,930).

With respect to **claim 19**, Krull discloses a filter 10, as shown in Fig. 2, having:

- a housing 11 having a wall 12 defining a closed end 13, an open end, an interior volume, and an inwardly extending ledge 30, 31, as shown in Fig. 5;
  - the housing 11 including a threaded region 19 adjacent to the open end;
  - the inwardly extending ledge 30, 31, being circumferential and extending completely along an internal surface of the housing wall 12;
    - the inwardly extending ledge 30, 31, being located between the closed end and the threaded region 19;

- a filter cartridge 20 oriented within said interior volume of said housing 11;  
said filter cartridge 20 including a tubular construction of filter media 24  
defining an open filter interior;
  - said tubular construction of filter media 24 having a first end;
  - said filter cartridge 20 includes an end cap 21 secured to said first end  
of said tubular construction of filter media 24; said end cap 21 defining  
an aperture in fluid communication with said open filter interior;
- a projection arrangement 51, as shown in Fig. 7, constructed and arranged to  
space said filter cartridge 20 from said housing wall 12 to define a fluid  
flowpath between said filter cartridge 20 and said housing wall 12;
  - the projection arrangement 51 includes a base and a sidewall;
  - said projection arrangement 51 including at least one projection 57 in  
extension from at least one of said base and said sidewall, as shown in  
Fig. 7;
  - the projection arrangement 51 engaging the inwardly extending ledge  
to space said filter cartridge 59 from said housing wall 12 to define a  
fluid flowpath between said filter cartridge 59 and said housing wall 12,  
as shown in Fig. 5.

With respect to **claim 20**, Krull discloses wherein said projection arrangement 51 includes a plurality of projections 57, as shown in Fig. 7.

With respect to **claim 21**, Krull discloses wherein each of said projections 57 extends axially to engage said housing 11, as shown in Fig. 5.

With respect to **claim 23**, Krull discloses wherein said base and said sidewall are part of said end cap 51, as shown in Fig. 5.

With respect to **claim 26**, Krull discloses wherein each of said projections 57 includes a free end, as shown in Fig. 7; each free end of said projections 57 engaging the inwardly extending ledge, as shown in Fig. 5.

With respect to **claim 27**, Krull discloses wherein each of said projections 57 extends radially to engage the inwardly extending ledge, as shown in Fig. 7 (see col. 8, lines 16-20).

With respect to **claim 28**, Krull discloses wherein each of said projections 57 extends radially from said base of said end cap 51, as shown in Fig. 5.

With respect to **claim 29**, Krull discloses wherein said sidewall includes a media-containing portion 58 that forms a continuous wall around said filter media 59; said media-containing portion 58 extending from said base; and said projections being generally orthogonal relative to said media-containing portion, as shown in Fig. 5.

With respect to **claim 31**, Krull discloses wherein said filter media 59 includes pleated media and a second end opposite of said first end; said end cap 51 is a first end cap; and said filter cartridge 20 further includes: a second end cap 22 secured to said second end of said filter media 59; said second end cap 22 being closed; and an inner tubular liner 23 circumscribed by said pleated media; said inner tubular liner 23 extending between said first end cap 51 and said second end cap 22, as shown in Fig. 2.

With respect to **claim 33**, Krull discloses the method steps of: inserting a filter cartridge 20 and a projection arrangement 51 into an open end of a housing 11; and engaging projections 57 on the projection arrangement 51 against a portion of the housing 11 to secure the filter cartridge 20 in the housing 11; the portion of the housing including an inwardly extending circumferential ledge 30, 31, extending completely along an internal surface of the housing 11; and the engagement of the projection arrangement 51 is against a side of the ledge directed to a closed end of the housing 11, as shown in Fig. 5.

With respect to **claim 34**, Krull discloses wherein: the filter cartridge 20 includes an end cap 51 having the projections 57 extending therefrom; and said step of engaging includes engaging the projections 57 from the end cap 51 against the inwardly extending ledge of the housing 11, as shown in Fig. 5.

With respect to **claim 36**, Krull discloses wherein: said step of inserting includes snapping the projections 57 over a radial protrusion 30, 31, in the housing 11; and said step of engaging includes engaging the projections 57 against the radial protrusion, as shown in Fig. 5.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 24, 25, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krull (U.S. 5,490,930).

**Claim 22** adds the limitation of wherein said base and said sidewall are part of a plate that is a separate piece from said end cap.

**Claim 35** adds the further limitation of wherein: said step of inserting includes inserting a filter cartridge and then inserting a separate plate into the open end of the housing; the separate plate including the projecting arrangement.

Krull **lacks** the limitations of claims 22 and 35.

It would have been obvious to make the end cap separable from a plate having the base and the sidewall since the courts have held that if for any reason it is desirable

to do so, then it would be obvious to make something separable for that purpose (see *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961)).

With respect to **claim 24**, Krull discloses wherein each of said projections 57 extends axially from said sidewall of said end cap 51, as shown in Fig. 7.

With respect to **claim 25**, Krull discloses wherein said sidewall includes a media-containing portion 58 that forms a continuous wall around said filter media 59; said media-containing portion 58 extending from said base and having an end; each of said projections 57 being in extension from said end of said media-containing portion 58, as shown in Fig. 5.

With respect to **claim 32**, Krull discloses all the claimed limitations stated above in claim 19, including a filter head 16 having a fluid flow inlet port 53 and fluid flow outlet port 19, as shown in Fig. 5, but **lacks** filter arrangement being releasably secured to said filter head.

It would have been obvious to provide the filter arrangement 10 releasably secured to the filter head 16 since the courts have held that if for any reason it is desirable to do so, then it would be obvious to make something separable for that purpose (see *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961)).



***Allowable Subject Matter***

Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 30 would be allowed because the prior art of record does not show or suggest a portion of the housing wall adjacent to the filter media defining an internal diameter about equal to an internal diameter of the housing wall between the threaded section and the internally extending ledge; between the internally extending ledge and the portion is a region of the housing wall having an internal diameter greater than the internal diameter of the portion to form a relief; the relief allowing the projection arrangement to spring back to a normal position.

***Response to Arguments***

Applicant's arguments, see page 3, lines 19-26, filed on April 28, 2008, with respect to the rejection(s) of claim(s) 19 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Krull (U.S. 5,490,930), as stated above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MADELINE GONZALEZ whose telephone number is (571)272-5502. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Madeline Gonzalez  
Patent Examiner  
August 1, 2008

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797